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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/823,578

04/14/2004

Huang-Chen Guo

3313-1156PUS1

5022

2292

7590

01/26/2006

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EXAMINER

PEACE, RHONDA S

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/823,578

Applicant(s)

GUO ET AL.

Examiner

Rhonda S. Peace

Art Unit

2874

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 13 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
Rhonda S. Peace  
Examiner  
Art Unit 2874

The 35 U.S.C. 103(a) rejection of claims 1-13 first expressed in the Office Action mailed 10/13/2005 with Marcuse et al in view of He et al is maintained, as the Applicant has not provided evidence in the remarks filed 1/13/2006 that place the claims in condition for allowance.

With regards to the remarks filed 1/13/2006, the Applicant has argued that the invention of Marcuse et al (US 6385383) differs substantially from the present invention for the following reasons:

- A) Marcuse et al used multiple masks, whereas the present invention requires the use of only one mask.
- B) Marcuse et al uses multiple types of polymers, whereas the present invention uses only a single type of polymer.
- C) Marcuse et al uses a direct (i.e. straight) waveguide, whereas the present invention uses a S-type waveguide.
- D) Marcuse et al discloses a temperature control apparatus which is difficult to manufacture, whereas the temperature control apparatus of the present invention is easy to manufacture.
- E) Marcuse et al discloses controlling the variation in the core's index of refraction by varying the temperature of the core, whereas the present invention discloses an easier method which makes it able to control the temperature of the core as only one polymer is used. Also, the attenuation control method of Marcuse et al does not pass the environment test temperature, whereas the attenuation control method of the present invention is within the environment test temperature.

In response to arguments A, B, D, and E, while these are differences that may exist between the prior art of Marcuse et al and the present invention, these are limitations which have not been expressed within the present invention's claims. For example, none of the claims 1-13 discuss the use of a mask, nor do they discuss that only one type of polymer must be used. Claims 2 and 10 set forth the limitation that the "core layer is made of polymer material," which is disclosed by Marcuse et al (column 4 lines 13-20, and column 1 lines 24-27). Further, the present invention places limitations upon the temperature controller which include the following:

- 1) the controller be operable to vary the temperature of the core. (claim 7)
- 2) the controller comprises a heater to vary the temperature of the core. (claim 8)
- 3) the controller comprises a cooling device to vary the temperature of the core. (claim 9)
- 4) the controller controls the temperature of the core to attenuate the intensity of the optical signal. (claim 10)

All of these limitations are disclosed by Marcuse et al (column 4 lines 13-26 and column 6 lines 7-18) and are discussed in detail in pages 3-6 in the Office Action mailed 10/13/2005. Claims 1-13 do not introduce the limitation that the controller must pass the environmental test temperature, nor do they even discuss the temperature spectrum under which the controller is intended to operate, or specify manufacturing conditions such as the controller must be easy to manufacture.

Further, in response to argument C, as was explained in the Office Action mailed 10/13/2005, Marcuse et al discloses a direct waveguide, but does suggest that other geometries may be used (column 3 lines 23-25). The limitation of an S-type waveguide is disclosed by He et al (2002/0136525), and He et al discloses the geometry of the waveguide (S-structure) creates greater amounts of attenuation than a straight waveguide (He: paragraphs 0020-0024, and 0033). As the goal of the device of Marcuse et al is to create attenuation (Marcuse et al: column 1 lines 40-55), one of ordinary skill would be motivated to combine the teachings of Marcuse et al and He et al, as this fiber geometry would allow the device of Marcuse et al to create larger amounts of attenuation without the introduction of additional equipment.

The Applicant has also argued that Marcuse et al and He et al are not compatible as Marcuse et al uses polymers, whereas He et al uses InP, a more expensive material. However, it is the concepts of fiber geometry and their inherent effects on a fiber's attenuation, proposed by He et al, which have been applied to the teachings of Marcuse et al, and not teachings which involve the materials used within the device, but simply only the shape of the device itself. Therefore, the materials used by He et al to form their device are irrelevant.

Finally, the Applicant has argued He et al does not overcome the deficiencies of the the primary reference Marcuse et al, as He et al teaches attenuation is varied by application of an electric field, and not temperature as is claimed by the applicant. However, as discussed above, it is the ideas of fiber geometry which are applied to the primary reference, and not the method by which the attenuation is controlled. Marcuse et al discloses the variation of attenuation by varying the temperature of the core (Marcuse et al: column 1 lines 40-55 and column 3 lines 54-57). The application of the teachings of He et al simply allows the device of Marcuse et al to create greater amounts of attenuation than would be possible with a straight waveguide by using an S-type waveguide.

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PRIMARY EXAMINER  
1/23/06